

Louisville Sustainability Advisory Board

Agenda

Wednesday, November 15, 2017
City Hall, 749 Main Street, Spruce Room
6:30 - 8:00pm

Chair: Allison Johanson

Secretary: Jamie Bartlett

6:30-6:45pm:

- I. Call to Order
 - a. Roll Call
 - b. Approval of Current Meeting's Agenda
 - c. Approval of October 18, 2017 Meeting Minutes
 - d. Public Comments on Items Not on the Agenda
 - e. Jay's Minute
 - f. Dave's Minute
 - g. Erica's minute

6:45-7:55pm:

- I. Waste Presentation – Lea Yancey
- II. Council Sustainability Study Session Feedback/Review of updated framework for 2 Year Sustainability Work Plan
- III. Budget, KPI priorities and goals
- IV. How to evolve LSAB role to support plan progress?

7:55 - 8:00 pm:

- V. Log volunteer hours
- VI. Items for discussion at our next meeting
- VII. Adjourn

Meeting Packet Contents:

Draft, 2 Year Sustainability Work Plan

Louisville Sustainability Advisory Board

Meeting Minutes: Wednesday, October 18, 2017

City Hall, 749 Main Street, Spruce Room

Chair: Allison Johanson

Secretary: Justine Vigil-Tapia

- I. **Call to Order:** The meeting was called to order at 6:31pm by Allison Johanson. Minutes taken by Justine Vigil-Tapia.
 - a. **Roll Call:** (Members present in bold): Jamie Bartlett, **Dan Delahunty**, **Allison Johanson**, **Mary Ann Heaney**, **Marianne Martin**, **Mark Persichetti**, **Justine Vigil-Tapia**; City-Staff Liaison Dave Szabados, City-Council Liaison **Jay Keany**, City Sustainability-Specialist **Erika Archer**; County Sustainability – **Lea Yancey**, Residents Ken Wilson
 - b. **Approval of Current Meeting's Agenda:** Approved current agenda with no changes.
 - c. **Approval of September 20, 2017 Meeting Minutes:** Meeting-minutes approved with the addition of notes from Mary Ann Heaney (Open Space Trail Connectivity and Wayfinding). Mark Persichetti to provide Kerry with updated minutes.
 - d. **Public Comments on Items Not on the Agenda:**

Xcel Colorado Energy Plan proposal – Erika Archer to circulate the letter to LSAB for comment. Return individual comments to Erika by October 20. LSAB members can also attend the upcoming study session meeting to present comments.

Mark Persichetti shared a "Recycle" handout from eco-cycle. Two additional types of plastics can now be processed by the center because of sorting improvements. Eco-cycle can now send cleaner plastics to recycle vendors (goal – improve revenue opportunities).
 - e. **Jay's Minute:** City council reviewed the budget at last night's meeting (no public feedback). Council requested some budget titles be changed on a few sustainability items to improve clarity. The Police Department will implement the recommendations from the completed energy audit (HVAC improvements, lighting). Rec-Center will continue to be built to a LEEDS standard but not pursuing certification.
 - f. **Dave's Minute:** No update.
 - g. **Erika's Minute:** PIE is hosting a luncheon on November 2; participants to share information and provide lessons learned. PIE business owners meeting is coming up, Dave S. to present at the meeting. Four staff trainings conducted today; PACE provided support for the training. There are a few grant opportunities coming up and Erika will evaluate what to apply for. Solar workshop coming up (co-session with City

of Lafayette). 40 RSVP's from Louisville. Commute Options in Louisville session is coming up on October 24; request for LSAB to promote. Louisville Elementary (5th Grade class) would like to get students involved with the Green Business Program. PACE is working with the school to figure out the details.

- II. SAP Matrix Update:** Discussion on what we need from council to support current and future progress.
- III. Preparation for presentation to City Council on Oct 24th, 2017:** Erika incorporated LSAB feedback on the Sustainability Action Plan. Conducted a walkthrough of the presentation outline (Erika's role/accomplishments, background on sustainability action plan, goal of plan, work plan, methodology used to prioritize work plan, progress). Reviewed scoring of activities – 26% high progress, 30% partial progress, 28% low progress, 16% no progress. Wrapped up discussion by identifying what support from council is needed.
- IV. LSAB To-Do List / 2018 Priorities:** Identified the following list of priorities
- a. Waste program (participate in RFP development)
 - b. Transportation Master Plan (provide RFP input and review responses)
 - c. Education and outreach (city programs, bee & garden programs)
 - d. Continual review of SAP progress to help council, staff and the community achieve progress towards the goals and celebrate accomplishments. Take a strategic approach with this review and update.
 - e. Identify, track and report out on community indicators (water usage, waste diversion, RTD ridership, traffic counts, etc.)
 - f. Grants/funding
- V. Log volunteer hours:** See table below.
- VI. Items for discussion at our next meeting (November 15):** Waste Presentation from Lea. Council feedback, Budget, How do we evolve the LSAB role to support plan progress?
- VII. Adjourn:** We adjourned at 8:04pm.

LSAB 2017 Meetings Schedule, Deadlines, Meeting Assignments

If you are unable to fulfill your assignment, you are responsible for finding a replacement!

Secretary to email agenda, AND previous month's minutes to Kerry Holle: kerryh@louisvilleco.gov	Meeting Date	Chair *	Secretary *
January 9	January 18	Dan	Allison Marianne
February 8	February 15	Mary Ann	Mark
March 6	March 15	Mark	Jamie
April 10	April 19	Jamie	Justine

May 8	May 17	Justine	Dan
June 12	June 21	Dan	Allison
July 10	July 19	Allison	Marianne
August 7	August 16	Allison	Mary Ann
September 11	September 20	Allison	Jamie Mark
October 9	October 18	Allison	Jamie Justine
November 6	November 15	Allison	Justine Jamie
December 11	December 20	Allison	Dan

*A crossed-out name followed by a second name denotes a substitute.

Hours tally: For the month of October 2017

Board Member	Activities	Hours
Allison Johanson	Meeting prep, attendance	4
Dan Delahunty	Meeting prep, attendance	1.5
Jamie Bartlett	Meeting prep, attendance	
Justine Vigil-Tapia	Meeting prep, attendance	3
Marianne Martin	Meeting prep, attendance	3
Mark Persichetti	Meeting prep, attendance, Bo-Co RCAB, Partners-in-Energy sessions	5
Mary Ann Heaney	Other sessions & work in August Meeting attendance, other sessions this month	7
	Total Hours	23.5

DRAFT

2-Year Work Plan for the
Louisville Sustainability Action Plan

Credits & Dates

| Forthcoming

Table of Contents

To be updated.

Overview

In November 2016, the Louisville City Council approved the first-ever Louisville Sustainability Action Plan (SAP), developed by the Louisville Sustainability Advisory Board (LSAB). The SAP is divided into five sustainability categories: Climate and Energy, Water, Transportation, Waste, and Local Food and Agriculture. The SAP expresses the desires of the City to make progress toward sustainability, both internally in the operations of the City facilities, and externally through the actions of the Louisville residential and business community. Intended as a supplement to the SAP, this 2-Year Work Plan sets specific, time-bound outcome goals for the City to implement the strategies in the SAP.

Goals & Objectives

The goal of this 2-Year Work Plan is to provide an assessment of progress made from the SAP and to recommend steps that may reasonably be performed within 24 months that will allow the SAP strategies to be substantially met. Recommendations are divided into actions which may be taken internally under the supervision of the City Manager and actions which would require City Council approval. Further recommendations will be provided to the LSAB regarding edit suggestions for the strategies themselves.

In order to meet the strategies set forth in the SAP, multiple considerations went into the recommendations so that they align with the Key Performance Indicator objectives for the City's Sustainability Sub-Program.

The Key Performance Indicator (KPI) objectives for the City's Sustainability Sub-Program are to "use environmental, economic and human resources to meet present and future needs without compromising the ecosystems on which we depend. Actively pursue energy efficient upgrades to realize cost savings and reduce environmental impacts."

Specific KPIs tracked annually by the City and that are relevant to this 2-Year Sustainability Work Plan include the following:

- Community: Waste and diversion
- Community: Greenhouse gas emissions per capita
- Community: Water use per capita
- Community: Energy use per capita
- City facilities: BTUs/Gross Square Foot

- City facilities: Percentage of City Fleet using alternative fuels
- City facilities: Energy savings from upgrades

Recommendations in this work plan that affect KPIs are given priority over recommendations that do not affect KPIs.

In addition to KPI objectives and targets, additional considerations that influenced the recommendations in this work plan were that the recommendations be:

- Collaborative, involving input and commitment from staff, governmental, residential, and business resources;
- Respectful of voluntary participation, insofar as it does not compromise the KPI objective of not “compromising the ecosystems on which we depend.”
- Technically viable, with solutions that reflect best practices and that have been tested and proven to work in similar context in neighboring or similar communities;
- Fiscally sound with a preference for recommendations for potential budgetary items showing a positive return on investment, but with consideration for recommendations if they offer a significant benefit to community well-being;
- Harmonious with existing activity to facilitate the expansion, enhancement or leveraging of previous and current local and regional planning efforts;
- Long-lasting in impact, with long-term gains for the community with solutions that are replicable, sustainable, and long-lasting.

The purpose and scope of this 2-Year Work Plan is to create a plan for the City of Louisville to provide specific guidance in the form of recommendations in order to realistically meet as many SAP strategies as possible over the next two years.

Definitions

A **target** refers to a conceptual goal, as outlined in the 2016 Sustainability Action Plan.

A **strategy** refers to a plan or direction that the City could take to partially or fully achieve the target, as outlined in the 2016 Sustainability Action Plan.

A **recommendation** refers to a specific action that could be taken in order to meet the strategy given in the 2016 Sustainability Action Plan.

Note: This section may be moved to the appendix. A request was made by council to define jargon used.

Method

To create this 2-Year Work Plan, the following method and framework was applied:

- 1) **Input.** Sustainability Input Interviews were conducted with relevant department heads, as well as with select stakeholders within departments, in order to capture sustainability input regarding the 57 strategies outlined in the SAP. These interviews not only provided critical information regarding the ability to complete these projects and resources required, but it also made the process of determining projects an inclusive one, helping to ensure collaboration and greater success to meet the strategies. In all, the 2-Year Work Plan represents input from more than 22 staff stakeholders across all departments in the City, including relevant department heads, the Louisville Sustainability Advisory Board, City Council (ongoing) and the public (future).
- 2) **Research.** Using the input and direction provided, existing programs and projects in the City of Louisville were further researched across departments. Neighboring communities were interviewed as well in order to gain insight regarding technical soundness, best practices, and lessons learned.
- 3) **Synthesis.** Findings from both the research and input were synthesized and processed into a list of recommendations, with the goal to fulfill the strategies outlined in the SAP, taking into consideration the goals and objectives of the Sustainability Sub-Program Key Performance Indicators.

4) **Prioritization.** To prioritize the recommendations, each was measured by the following factors: stakeholders, time required to implement the strategy, funding expectations, and importance relative to Greenhouse Gas Emissions. The following weights were assigned and applied in order to give a final prioritization score on a scale of 0 (low) – 12 (high):

Funding

Scale: 1 (least availability of funding) through 5 (highest availability of funding)

- 1 = Requires additional budget
- +3 = Likely to find all or partial funds (i.e. through grants)

- 5 = Within current budget

A strategy may receive up to 5 points for Funding.

Estimated Timeframe for Completion

Scale: 1 (longest amount of time) through 4 (shortest amount of time) / Ongoing = +1

- 1 = 24 months+
- 2 = <24 months
- 3 = <18 months
- 4 = <6 months
- +1 = Ongoing

A strategy may receive up to 5 points for Timeframe.

Key Performance Indicator Alignment

This is a multiplier to weight recommendations in relation to Key Performance Indicator targets.

- 0 = Recommendation does not align with key performance indicators
- 1.1 = Recommendation aligns with at least one key performance indicator
- 1.2 = Recommendation aligns with two or more key performance indicators

Prioritization Score

The total prioritization score is determined by the following formula:

(Funding Score + Timeframe Score) x KPI Alignment = Prioritization Score

Domain

Additionally, each recommendation is categorized whether it falls under the decision-making authority of the City Council (with budgetary or legislative approval required) or whether it can be handled at an operational level by the City Manager.

It should be noted that this framework should not be considered the final prioritization designator, as there may be strategies which receive a lower prioritization score than stakeholders desire, but remain a priority. In these cases, stakeholders have flexibility to add/delete priorities based on other factors. This framework should only be used as a tool to help in the prioritization of projects into this 2-Year Work Plan.

Prioritization refers to how easily (funding resources) and quickly (near or long-term) a recommendation may be accomplished, as well as how well it aligns with City KPIs.

The framework matrix was populated with the data based on research and input received from the stakeholders of these strategies, and prioritization scores were tallied.

5) **Prioritized Recommendations.** Recommendations were compiled in order of timeframe, funding and KPI alignment, and are provided with the detailed scoring in the section called List of Action Recommendations by Priority, located in Appendix A. Notes on progress since the publication of the 2016 Sustainability Action Plan and input from interviews and research are in the section called Detailed Progress and Recommendations, located in Appendix B. A summary of recommendations is provided in the next section, divided into recommendations for City Council, and recommendations for general City operations, under the authority of the City Manager

Summary of Recommendations by Domain

The next two sections contain summary recommendations for the City Council and for City Operations.

Prioritization scoring may be found in Appendix A – List of Action Recommendations by Priority. Progress made on SAP strategies as well as the input and research that went into the recommendations may be found in Appendix B - Detailed Progress and Recommendations.

City Council Recommendations

Following are a list of the top recommendations for the City Council to consider over the next two years, according to priority.

2018 City Council Recommendations:

Proposed: List recommendations, along with notation regarding budgetary or legislative expectations.

1. TBD
2. TBD
3. TBD
4. TBD
5. TBD

2019 City Council Recommendations:

1. TBD
2. TBD
3. TBD
4. TBD
5. TBD

City Operations Recommendations

Following are the top recommendations for the City Manager to consider over the next two years, according to priority and timeline.

2018 City Operations Recommendations:

1. TBD
2. TBD
3. TBD
4. TBD
5. TBD

2019 City Operations Recommendations:

1. TBD
2. TBD
3. TBD
4. TBD
5. TBD

Appendix B - List of Action Recommendations by Priority

Following is a list of recommended actions in order of highest to lowest priority, arranged according to category.

Note: This chart contains KPI and Domain columns. Also, the Finding structure is slightly different than before. Seeking input.

Energy Recommendations by Priority

New chart structure proposal:

Strategy from Sustainability Action Plan	Recommended Action	Stakeholders									Timeframe Estimate				Funding				Sustainability Key Performance Indicators Addressed								Domain		Total			
		Finance	Public Works	Planning	City Manager	Econ Dev	Library	Police	Parks & Rec	Boards/Comm	Council	<6 months	<18 months	<24 months	24 months +	Ongoing	Within Current budget (5 pts)	Requires additional budget (1 pt)	Likely to find all or partial funds (grants) (3 pts)	Funding based on decision	Community: Waste Generation & Diversion	Community: GHG Emissions per capita	Community: Water use per capita	Community: Energy use per capita	City facilities: BTUs/Gross Square Foot	City facilities: % of City Fleet using alt fuels	City facilities: Energy savings from upgrades	Total KPI Multiplier	City Operations	City Council	Prioritization Score	
Set new goals for GHG reductions	Determine a plan for the frequency of Citywide GHG inventories, as well as community-wide near- and long-term GHG emissions reduction targets, as per Resolution 2017-34.				x				x	x	4									1	x		x		x	x			1.2		x	

Water Recommendations by Priority

New chart forthcoming.

Transportation Recommendations by Priority

New chart forthcoming.

Waste Recommendations by Priority

New chart forthcoming.

Local Food and Agriculture Recommendations by Priority

New chart forthcoming.

Appendix B - Detailed Progress and Recommendations

The following chart assesses progress made, notes from interviews and research, and lists recommended actions to meet the 57 strategies listed in the Sustainability Action Plan, determined by the Louisville Sustainability Advisory Board and approved by the City Council in November 2016.

How to Read This Chart

(Assigned Order)

This column represents the order of the strategy as it appears in the 2016 Sustainability Action Plan.

Strategy from SAP

This column lists the original strategies, as they appear in the 2016 Sustainability Action Plan.

Progress

This column shows a score from 1-4 regarding the level of progress made since the publication of the 2016 Sustainability Action Plan.

Below is the amount of progress that has been made to date since the publication of the SAP:

- 26% of the strategies have made High Progress (4).
- 30% of the strategies have made Partial Progress (3).
- 28% of the strategies have made Low Progress (2).
- 16% of the strategies have made No Progress (1).

Progress Scale System:

- **(4) High Progress** - Strategy has been met and/or is ongoing
- **(3) Partial Progress** – Strategy is in advanced stages
- **(2) Low Progress** – Strategy is in beginning stages
- **(1) No Progress** – No planning or action to date

Notes

Notes include input from interviewees, as well as research results.

Recommendations

This column displays the resulting recommendations made for actions that could be taken to make progress within a 2-year timeframe on the strategies listed in the 2016 Sustainability Action Plan. These recommendations are prioritized in Appendix A, and presented in Summary form in the body of this document in the section called Summary of Recommendations.

Question: Should we change the way the info is presented? Is the chart format confusing?

Note that the strategies appear as they appeared in the 2016 Sustainability Action Plan, as approved by Council. Recommendations for edits to the strategies directly will be provided to the LSAB for consideration in a future revision of the Louisville Sustainability Action Plan.

Climate & Energy				
#	Strategy from SAP	Progress	Notes	New: Recommended Action(s)
Internal Target 1: Move towards carbon neutrality for all City operations				
1	CE-IT1S1: Update inventory of greenhouse gas (GHG) production	4	<p>Boulder County has completed an updated 2016 Greenhouse Gas (GHG) Inventory for the entire county, by municipality. The City of Louisville worked with the county's consulting firm to provide all requested information to complete this study to the county's consulting firm. The county performed this inventory last in 2011 and may perform another inventory in 2021.</p> <p>In addition, the City of Louisville performed an additional GHG Inventory for the City in 2012, through the University of Minnesota.</p>	<ul style="list-style-type: none"> None
2	CE-IT1S2: Set new goals for GHG reductions	2	<p>In the 2017 Louisville Energy Action Plan, the City made a goal to reduce total community-wide energy use by 1% annually, which could result in an 11% reduction over the 2015 baseline by 2027. In addition, Louisville's City Council advanced its commitment to a healthy and sustainable community by voting to adopt Resolution 34-2017 in support of the Paris Climate Agreement.</p> <p>While the above actions both support a goal to reduce Greenhouse Gas emissions and further the goal to reduce energy usage through energy efficiency (EE) and renewable energy (RE) in the Energy sector, they do not specifically define community-wide near- or long-term GHG emissions reduction targets for the City, taking into account Transportation, Water, Waste, or Local Food and Agriculture. An example of a strong target goal would be: Reduce community-wide GHG emissions by 5% by 2022 (5 yrs), and by 26% by 2037 (20 years). A strong target goal can likely be met with the natural progression of technology, continued support from staff and council through purchasing decisions and actions made in favor of EE and RE, and with support from a variety of partners (Boulder County EnergySmart,</p>	<ul style="list-style-type: none"> Determine a plan for the frequency of Citywide GHG inventories, as well as community-wide near- and long-term GHG emissions reduction targets, as per Resolution 2017-34.

			Partners for a Clean Environment (PACE), Xcel Energy, etc.) under the existing Louisville Energy Stars brand. All departments have been queried as to successful actions that have been taken and that may be taken. The likelihood of successful residential and business participation will need to be weighed into these goals. City Council's input and approval is critical. While there is no penalty for failure to meet the goals set forward, the goals themselves advance and inform outreach and initiatives.	
3	CE-IT153: Purchase lowest fuel-use vehicles practical for the City fleet.	2	<p>The City purchased a Nissan Leaf in 2016.</p> <p>Additional electric vehicles similar in function to the Nissan Leaf (~\$30,000) will likely exceed the current budget for most replacement vehicles in up-front purchase cost. Partial grant funding is likely available to address this gap. Current grant opportunities through RAQC, for example, will fund 80% up to the following set of maximums:</p> <ul style="list-style-type: none"> • Electric Vehicle: the incremental cost differential between an EV and the comparable gasoline vehicle up to \$8,260 • Level 2, Single Port Station: \$3,260 • Level 2, Dual Port Station: \$6,260 • Level 3, Single Connection Standard Station: \$13,000 • Level 3, Multiple Connection Standard Station: \$16,000 <p>Most likely immediate vehicle need: The Police Department has identified one vehicle (non-patrol) that will be up for replacement in 2018 and would like to look into the possibility of purchasing an electric vehicle, as well as a potential EV station for the department. Based on current offerings through RAQC, it is likely that there will be an appropriate grant to provide partial funding at the appropriate time. In addition, vehicles are being designed which would be appropriate for patrol fleet in which the department chief has expressed interest, for example the 2019 Ford Police Responder Hybrid Sedan.</p> <p>In addition, the Facilities Manager has suggested that the City could greatly improve emission output by exploring electric lawn mowing equipment. Currently, several options exist for riding tractor mowers and with performance ratings on par with gas engines, these should not be ignored. Electric riding mowers are generally in the \$2500 range (~\$1000-\$1500 more than a gas mower), but grants do exist to offset the price difference. The RAQC grant, for example, pays for 80% of the cost difference between an electric vehicle and a gas vehicle. Benefits to an electric mower would be noise pollution, as well as a significant reduction in GHG emissions.</p>	<ul style="list-style-type: none"> • Determine with the Police Department whether they would like to purchase an electric vehicle/EVSE in 2018. If yes, then a grant application should be made in Q1 2018. • Perform analysis on vehicle replacements (including road vehicles and riding tractor mowers) on a case-by-case basis, with a preference toward electric and lower emission vehicles, as appropriate for use. • Apply for a RAQC grant to install an electric vehicle charging station (EVSE) at the Recreation Center in 2018.

			<p>Also, the City Manager's Office is planning to apply for a grant to install an electric vehicle charging station (EVSE) at the rec center in 2018. A plan is being discussed to explore future charging stations at City facilities.</p> <p>Additionally, it is notable that the City has done extensive work to evaluate a compressed natural gas (CNG) station.</p>	
4	CE-IT1S4: Develop conversion plan for City vehicle fleet to implement new vehicle technologies as they become available for testing and use.	3	<p>Public Works and the City Manager's Office have performed an analysis of what it would cost to replace current fleet vehicles and have informally agreed on the following assumptions: 1) It is generally desired that standard fleet vehicles should be upgraded to electric, hybrid, and alternative fuel vehicles over time, as appropriate, 2) It is not cost effective to make fleet replacements without an immediate need, 3) Not all vehicles would fulfill their function requirements as electric or alternative vehicles with the current technology available, and 4) technology and cost of alternative fuel vehicles is expected to improve over the next few years. Therefore, analysis should be performed on a case-by-case basis as vehicles need to be replaced to determine cost-effectiveness and appropriateness of use, as well as technology advances and funding opportunities, with a strong leaning toward electric, hybrid, and alternative fuel vehicles where possible. This plan has been generally agreed on verbally, but could be drafted as policy to be added into an existing purchasing policy.</p>	<ul style="list-style-type: none"> Formalize conversion plan for City vehicles with new technologies. The City Manager's Office should work in tandem with Public Works to meet this objective, with input from other affected departments, as necessary.
5	CE-IT1S5: Implement controls and policies to limit idling of City vehicles.	1	<p>Based on department interview feedback, any adopted policy to limit idling of City vehicles would need to consider the situation (e.g. in extreme heat or cold, should car should be left idling for comfort?). Even so, it is generally agreed by interviewees that more could be done by staff drivers.</p> <p>It should be noted that some actions have been taken by the city to reduce community-wide idling:</p> <ul style="list-style-type: none"> In coordination with DRCOG, the City assisted to complete corridor timing improvements to reduce vehicle delay/idling/emissions. In coordination with Superior, Louisville led the initiative to build the Diverging Diamond Interchange (DDI), which saved more delay/idling/emissions on the US 36 BRT route than the previous US 36 RTD Queue Jump project was achieving. 	<ul style="list-style-type: none"> Create a simple awareness campaign addressing the reduction of idling in City vehicles and determine if an official policy is appropriate. Staff may be educated about vehicle idling by both email and through general staff-wide sustainability training.

			Note: Clarification is needed by what is meant by the “controls” to be implemented in this strategy.	
6	CE-IT1S6: Install LED traffic signals.	4	Nearly all traffic lights in Louisville have been converted to LED.	<ul style="list-style-type: none"> None. Project is effectively complete.
Internal Target 2: Move Toward Carbon Neutrality for City Buildings				
7	CE-IT2S1: Aim for all eligible existing City buildings be benchmarked using the ENERGY STAR performance standards. For ENERGY STAR eligible buildings, a strategy and costs will be developed for energy efficiency improvements.	3	<p>The Facilities Manager reports that an attempt has been made within the last year to benchmark City buildings using Energy Star, with mixed results. Energy Star benchmarks energy usage (i.e. energy data from Xcel can be downloaded into a portfolio over time) and compares it to other buildings in the area. If a building is in the top 25% in efficiency comparatively, then it is considered to be an Energy Star building. Challenges with the City facilities include the lack of availability of relevant templates through the Energy Star interface. For example, the library at face value seemed like it would be a good building to benchmark with Energy Star. When data was entered into the application, however, the presence of a parking garage under the building proved problematic for the assessment. Similar challenges exist with the Recreation Center, as an “Office Building” template can’t be filled out, and a Rec Center has many features that a normal office building would not have (i.e. swimming pool, showers). Challenges exist in tracking the Police Department in comparison to other similar buildings in that the courthouse is attached. It functions as two separate buildings, with different hours. The Golf Course, too, is not a standard facility with standard energy usage needs.</p> <p>Still, the Facilities Manager thinks the following buildings may be able to be measured with some creativity, as long as certain data sets are removed to even out the comparison baselines:</p> <ul style="list-style-type: none"> Library (separate parking garage data) City Hall (This was last measured through Energy Star at 60% and adjustments have been worked on.) Rec Center (mechanism unknown) PD (separate courthouse energy data) <p>In addition, for facilities not able to be measured by EnergyStar, upgrades to enhance efficiency should also be explored. For example, last year Xcel replaced 677 cobra head streetlights with LED. The City still has approximately 1,200 non-cobra head streetlights to replace in order to reduce energy consumption. This project does not directly address this or any other strategy included in the SAP, but should be added as an additional strategy to reduce</p>	<ul style="list-style-type: none"> Explore whether the Library, Police Department, and Recreation center might be usefully be measured through Energy Star. Update the Energy Star data on City Hall and any other buildings that may be quantified in this way on an annual basis. Develop strategy and costs for energy efficiency improvements for buildings and facilities on a case-by-case basis. Develop strategy and costs for replacement and/or evaluation of remaining non-cobra head streetlights.

			energy usage in city facilities going forward.	
8	CE-IT2S2: Expand solar and renewable energy purchases for City buildings	3	<p>The City currently has 1178 kW of solar capacity online to use at the City's municipal facilities, with another 1000 kW purchased that is not yet functional. When that solar array comes online the end of 2018 the resulting 2.178 MW will enable the City to cover over 50% of its municipal electric demand with renewable energy.</p> <p>The City is in the beginning stages of exploring the possibility of further alternative energy purchases. Until the most recent purchases come online and we can determine what eligible metered electricity we have left, it is not possible to make a useful comparison between available renewable avenues for the remainder of the City's energy needs.</p> <p>Going forward, the City has several potential options to offset its remaining energy needs to renewable sources:</p> <ol style="list-style-type: none"> 1) Solar garden in Louisville for municipal / residential use: Early conversations with a nonprofit solar garden company would not only offer the City another opportunity to further offset its own energy load, but would also allow low income residents an opportunity to participate in solar credits at a significantly reduced monthly energy cost. The challenges are: availability of city land, length of time to develop, ROI after staff time and current market conditions are considered. 2) Solar garden offsite for municipal use only: Early conversations with a for-profit company indicates that solar capacity would be available within 12 months, should the City wish to make an agreement for another agreement similar to the current Power Purchase Agreements in place. The challenge is ROI after staff time and current market conditions are considered, as well as the availability of eligible energy streams. 3) Wind power: Considering the City has already offloaded its peak energy use to solar (soon to be up to 50%), it may be as or more cost effective to elect wind source for some or all of the remaining facility energy needs. This would allow the City to quickly transition the rest of its energy source to renewables. While it would cost a little more per watt than what the City currently pays, it may have a long-term ROI comparable to the solar agreements without utilizing and stretching staff resources. 4) Upcoming Solar Rewards Program through Xcel: Xcel is preparing to roll out a large solar campaign for residential and commercial (separately) in 2018. 	<ul style="list-style-type: none"> • Explore and compare opportunities to make a plan to transition the remaining 50% of municipal facilities' energy needs to renewable sources.

			<p>The idea is mostly familiar - the customer would buy in at a set rate for 5+ years, but the customer would also get the recs and deal directly with Xcel, rather than a third party. Like wind source, the rate would be slightly higher than the existing rate/watt, but it would be set, hopefully offsetting inflation expectations at least at some level. The customer would be tapping into an enormous solar pool that they are setting up, not tied to a specific solar garden.</p> <p>According to the Director of Public Works, we need to also be thinking in relation to renewables what our strategy is in the long term. He points out that while the City can claim a certain percent renewable now at certain cost due to current agreements, in 15-20 years those agreements run out. We will be left with solar equipment we own, but it is uncertain what their production efficiency will be and/or replacement costs. If costs don't change we will be facing a renewal cost possibly without credits that would require an investment of \$50-150k per year to renew and have those assets over a new lifespan. We may need to think in a larger scope about creating a "Sustainability Utility" that considers these costs and establishes a long term funding source and financial plan that can manage finances over a longer term view. The City's biggest risk right now is not today but what happens in 15 years with the renewable portfolio.</p>	
9	CE-IT2S3: Adopt building codes & policies that promote energy efficiency in new and existing buildings.	2	<p>According to the Planning and Building department, we should first evaluate whether either of the newer code versions would provide energy efficiency benefits for new construction, and then evaluate whether we want to adopt those.</p>	<ul style="list-style-type: none"> Guidelines favoring energy efficiency should be included in the new PUD as potential "waiver criteria". Continue to evaluate the adoption of updated building codes to the advancement of energy efficiency in new buildings, every three years as appropriate.
10	CE-IT2S4: Aim to achieve 80% of all points within the Energy & Atmosphere section of the	3	<p>The new Recreation Center is on course to earn between 60-79 points (gold standard) under the Energy & Atmosphere section of the USGBC LEED rating system. Due to cost, however, the City will not seek formal certification. It is</p>	<ul style="list-style-type: none"> Continue to seek 60-79 points (gold standard) under the Energy & Atmosphere section of the USGBC

	USGBC LEED for new City building construction.		<p>worth noting that interviews with the Planning Department revealed that the LEED system, while popular, may not be the ideal rating system, with suggestions that the Green Globe system may be better suited to the City's needs. For the LEED system to be aspired toward as a City policy, this will require a more thorough discussion involving the Planning Department.</p> <p>Note: The LEED system is not based on percentages, but rather on a point system. Interviews reveal that the intention with the "80%" strategy was to represent a gold standard.</p>	<p>LEED rating system (or equivalent system) for new municipal buildings, including the new Recreation Center, on a case-by-case basis, as appropriate.</p> <ul style="list-style-type: none"> If seeking a LEED Gold Standard for new municipal buildings is desired as a policy, the Planning Department should make a recommendation to the City Council for potential formalization through resolution.
11	CE-IT2S5: Perform energy audits of City facilities.	4	<p>The Facilities Manager has been regularly tracking the BTUs/ft2 since 2014 and has been making significant energy improvements as a result.</p> <p>Additionally, the Facilities Manager worked with Xcel in Fall 2016 to perform energy audits on City facilities with mixed results. He reports that they were not as thorough or as accurate as he had hoped they would be.</p> <p>Xcel is currently offering thorough building audits for \$7500/\$2500.</p>	<ul style="list-style-type: none"> Continue to quantify energy usage data annually by BTU/ft2, performing regular audits of municipal facilities.
External Target 1: Increase energy efficiency and renewable energy in commercial and residential sectors				
12	CE-ET1S1: Promote and use available EnergySmart efficiency services for residents.	4	<p>Boulder County's EnergySmart offers energy efficiency and renewable energy services and funding to residents and businesses to improve their bottom line.</p> <p>As a municipality, the City of Louisville is not eligible to "use" EnergySmart services. Rather, the City acts as an outreach vehicle for EnergySmart services. Current EnergySmart offerings include energy audits, solar rebates, energy efficiency discounts and low interest energy loans.</p> <p>The City of Louisville has recently stepped up its promotion of EnergySmart efficiency services via the City website and other channels as appropriate, including a September water bill insert and a school kit insert scheduled for fall 2017. EnergySmart is an active partner to Louisville in Xcel Energy's Partners in Energy program and is additionally promoted by the City under the Louisville Energy Stars logo. Partners for a Clean Environment (PACE) also actively promotes EnergySmart through its Louisville business outreach, in</p>	<ul style="list-style-type: none"> Continue to work closely with Boulder County Sustainability office to promote available EnergySmart efficiency services to Louisville's residents and businesses through both the City Manager's Office and Planning and Building. Host a community outreach session to address energy rebates available to Louisville residents.

			<p>coordination with the City. Data from the County regarding the number of Louisville residents served by EnergySmart is included in the Appendix.</p> <p>The Planning Department has expressed a desire to be better equipped to perform outreach for EnergySmart services.</p>	
13	CE-ET1S2: Promote and use Partners for a Clean Environment (PACE) sustainability services for businesses, and collaborate on a green business recognition program.	4	<p>Over the last year, the City has promoted Partners for a Clean Environment (PACE) services via its website and through its Green Business Recognition program, in which PACE plays a key role. Affiliated with Boulder County, PACE is also an active partner to Louisville through Xcel Energy's Partners in Energy program. PACE also works through other organizations, such as with Western Disposal, the CTC Building Owner's Association, and the Louisville Chamber of Commerce to reach Louisville businesses.</p> <p>The City strongly encourages and promotes PACE for its business outreach services, which includes "free expert advisor services, incentives and a certification program to help businesses measure and gain recognition for their successful progress in energy, waste, water and transportation. PACE Partners are businesses committed to supporting a strong economy, implementing environmentally sustainable practices and becoming leaders in our community." It should be noted that PACE also actively promotes Boulder County EnergySmart services.</p>	<ul style="list-style-type: none"> Continue to promote Partners for a Clean Environment (PACE) to help businesses reduce energy and costs, and make progress in energy, waste, water and transportation improvements.
14	CE-ET1S3: Provide and develop information for residents and businesses on conservation and rebate programs.	4	<p>The City has significantly stepped up its promotion of energy conservation and rebate programs, most notably as of May 2016 when the City of Louisville signed a Memorandum of Understanding to participate in Xcel Energy's Partners in Energy offering for two years. Through a facilitated engagement process in partnership with Xcel Energy, the City developed the Louisville Energy Action Plan, as well as the Louisville Energy Stars brand for programs that promote energy efficiency and support the City's Sustainability Action Plan. As an outcome of this plan, the City's goal is to reduce total energy use by 1% annually, which could result in reducing total energy use by 11% over the 2015 baseline by 2027. Conservation and rebate programs that accomplish the City's goals developed in the Louisville Energy Action Plan are advertised under the Louisville Energy Stars logo.</p> <p>The City of Louisville's Energy Stars program developed in partnership with Xcel Energy's Partners in Energy encourages energy efficiency and renewable energy, leverages resources and benefits the economic vitality, environmental health and well-being of the community through the following strategies:</p>	<ul style="list-style-type: none"> Continue to use the Energy Stars logo, developed in conjunction with Xcel Energy's Partners in Energy program, to promote and develop information for residents and businesses on conservation and rebate programs for energy efficiency and renewable energy.

			<ul style="list-style-type: none"> • Large Business Outreach • Grow the Green Business Program • Increase Residential Participation in Priority Areas • City Showcase - Integrate Energy Efficiency in City Facilities • City Showcase - Share Information <p>Programs are promoted on the website, in newsletters and other outreach materials, as well as through programs hosted at the Library. EnergySmart and PACE services play a key role in the strategy, among others. The newly hired Sustainability Specialist also ensures information about these programs are updated and provided for public use. It should be noted that the Planning Department has expressed a desire to be better equipped to perform improved outreach for conservation and rebate services.</p>	
15	ET1S4: Adopt building codes & policies that promote energy efficiency in new and existing buildings.	2	This strategy seems to duplicate strategy IT2S3 above.	<ul style="list-style-type: none"> • None. Strategy is covered under strategy IT2S3.
16	ET1S5: Support utility demand-side management programs and renewable power supply initiatives.	3	Working as a partner with Xcel Energy in Xcel Energy's Partners in Energy Program, the City is actively promoting DSM programs and renewable initiatives through web outreach and community sessions. For example, the Louisville Sustainability Series Session #1 (September 2017) was on the topic of "Energy & Money." Xcel Energy and Energy Smart presented their programs to 41 attendees. Both the presentation and links to resources have been published on the City's site. In addition, the City is working in tandem with the City of Lafayette to host a free 3-hour solar workshop on October 21, 2017. Regarding "[Support] renewable power supply initiatives": First, by "power supply," it is assumed this is referring to the "energy source" (i.e. solar, wind). Second, it is unclear what is meant by "support." Are funds or management being suggested? If what is meant is an intention to "promote," then: The City is currently promoting renewable power source initiatives through the promotion of Boulder County's EnergySmart. Furthermore, the City is beginning to explore a way to support an affordable renewable power sources.	<ul style="list-style-type: none"> • None. This strategy appears to be covered under ET1S3.
17	ET1S6: Promote low-interest financing for residents and businesses to complete energy efficiency upgrades &	4	The City is currently promoting EnergySmart's low interest energy loan program in conjunction with Elevations Credit Union on the website and through outreach materials, such as the water bill insert in September 2017. This was also promoted through the Louisville Sustainability Series Session #1:	<ul style="list-style-type: none"> • None. Strategy is covered under ET1S1.

	install renewable energy.		Energy & Money focused on energy savings held at the Library. This strategy is fully dependent on EnergySmart offerings, as the City has no current capacity or mechanism to develop such a program with a lender.	
Water				
Internal Target 1: Reduce water usage and improve efficiency of water use with City buildings				
18	W-IT1S1: Benchmark all City buildings' indoor water use.	4	<p>The Finance department has provided the Public Works Department indoor water use information for all City buildings for the past three years. Public Works regularly monitors usage.</p> <p>A further step could be to transform the information into a dashboard and provide it to the public via the website, if desired.</p>	<ul style="list-style-type: none"> Public Works and the City Manager's Office should discuss what it would like to do with the water usage information provided (e.g. for public or internal usage), as well as how to continue benchmarking on an ongoing basis.
19	W-IT1S2: Replace or retrofit City building plumbing fixtures to meet or exceed current code requirements	3	<p>Over the past few years, the Public Works Department has worked hard to replace or retrofit City plumbing fixtures. For example, aerator devices have been installed on City building faucets to reduce water usage and many toilets already are 1.6 gallons. Recently, several urinals at the library were replaced for 1/8 gallon flushes. It should be noted that there are still replacements to be made, but this is ongoing, as is appropriate, needed, and within budget. According to the Facilities Manager, an audit would be required and could be reasonably accomplished to determine a more thorough replacement schedule.</p>	<ul style="list-style-type: none"> Continue to replace or retrofit City building plumbing fixtures to meet or exceed current code, as appropriate. Perform an audit on City plumbing fixtures to determine what remains to be done and create an action plan.
20	W-IT1S3: Achieve 80% of all the new construction water efficiency points in the USGBC LEED for water use reduction and rain water management, applicable to specific type of building.	3	<p>The new Recreation Center is being designed to earn between 60-79 points (gold standard) under the Water Use Reduction & Rain Water Management section of the USGBC LEED rating system. Due to cost, however, the City will not seek formal certification. The efficiency measures are expected to yield significant water usage savings over the life of the building, which would affect water production costs by the City.</p> <p>See CE-IT2S4 about potentially creating a City policy to address environmental standards.</p>	<ul style="list-style-type: none"> Continue to seek 60-79 points under the Indoor Water Use and Rainwater Management sections of the USGBC LEED rating system (or equivalent system) for new buildings, including the new Recreation Center, on a case-by-case basis.
21	W-IT1S4: Manage and upgrade infrastructure to reduce leaks in the system.	4	<p>The Public Works Department habitually checks for leaks in the metering system, performing an audit annually on a different third of the system. This year, they will be performing a regularly scheduled complete audit. Known</p>	<ul style="list-style-type: none"> Continue to manage and upgrade infrastructure to reduce leaks in the water metering system,

			leaks are addressed within 24 hours. Leaks are costly and usually noticeable, often causing larger infrastructure problems (i.e. sinkholes in pavement). There are currently no known leaks in the system.	including the performance of scheduled annual audits.
Internal Target 2: Improve efficiency of water use on Open Space and City landscaping				
22	W-IT2S1: Create a community-wide green infrastructure plan to capture and infiltrate rain water where it falls, thus reducing storm water runoff.	1	This requires a planning process as part of a Stormwater Master Plan. According to one member of the LSAB, this strategy is “complicated due to ‘rain barrel’ laws in Colorado. The goal with this strategy would be to promote less stormwater runoff directly from pavement to the streams (thus reducing pollution in stormwater) and to have areas designed with plant selection and drainage to allow for reduced irrigation. Basically, rather than treating stormwater as a nuisance that needs to be directed away from City properties or new developments, some water would be put to use or allowed to infiltrate.” Interviews with Public Works reveal that a Stormwater Master Plan is on the radar. Unknown funding required at this time. \$150-300K could potentially be largely funded (75%) through Community Development Block Grants (CDBG).	<ul style="list-style-type: none"> Plans for a Stormwater Master Plan should be further developed. The desire to create a community-wide green infrastructure plan to capture and infiltrate rain water should be bookmarked for discussion for incorporation.
23	W-IT2S2: Encourage quality drought resistant landscaping through the development review process.	3	<p>According to the Parks and Recreation Department, the City utilizes xeric and low water plant material where feasible and/or desired. There is a horticulturalist on staff and additional support staff that keeps up the plant material around town. This horticulturalist is consulted on new-build projects as part of the process.</p> <p>In addition, the Planning and Building Department states that it plans to include language encouraging quality drought resistant landscaping in the new design guidelines.</p>	<ul style="list-style-type: none"> Continue to watch for opportunities to implement drought resistant landscape. The Planning and Building Department should include language encouraging quality drought resistant landscaping in the new design guidelines.
Internal Target 3: Minimize use of treated water for non-potable functions				
24	W-IT3S1: Use non-drinking water systems to meet residential, industrial, and agricultural needs when feasible.	3	The City uses the raw water it can through water rights, as well as re-use water, to irrigate the golf course, the sports complex, Community Park, etc. This is because these locations lie along current pipelines designated for reuse water. There has been discussion and some planning for expanding the use of re-use water system to other areas such as Heritage Park and Miners Park but this would involve a large infrastructure build-out.	<ul style="list-style-type: none"> Continue to watch for opportunities to use non-potable water to meet needs when feasible.
Internal Target 4: Improve and maintain water quality				
25	W-IT4S1: Continue to update	3	The Wastewater treatment plant has been fully replaced and procedures	<ul style="list-style-type: none"> Continue to update equipment and

	equipment and procedure manuals related to water use, wastewater and storm water treatment and incorporate methods to promote sustainability & limit environmental impacts.		streamlined. Updating equipment and procedures in general is an ongoing process in response to noted inefficiencies, as audits are regularly performed.	procedures to promote sustainability & limit environmental impacts.
26	W-IT4S2: Aim to have Coal Creek removed from State's list of impaired or polluted waters.	1	It is believed that most of the pollution in the creek is caused from agricultural/raw water runoff. The desire and plan to remove Coal Creek from the State's list of impaired or polluted waters should therefore be included in a Stormwater Master Plan.	<ul style="list-style-type: none"> Add the desire and plan to remove Coal Creek from the list of polluted waters to the future Stormwater Master Plan.
External Target 1: Expand water conservation education for City residents and businesses				
27	W-ET1S1: Conduct a gap analysis of the water efficiency tools, resources and incentives for residents and businesses.	1	While a number of resources exist on the City's website, a gap analysis could be developed to better identify gaps to help inform outreach initiatives.	<ul style="list-style-type: none"> Conduct a gap analysis for community resources for water efficiency tools, to be maintained annually to identify gaps and inform outreach initiatives.
28	W-ET1S2: Promote and continue to use local water quality programs including: Keep it Clean; Boulder Area Sustainability Information Network (BASIN); PACE; Center for ReSource Conservation; Slow the Flow; and EnergySmart.	4	The City and LSAB have worked together to ensure that relevant programs that promote water conservation and water quality are promoted via the City's website. Water bill inserts are another great method of outreach to the community and should continue to be used to offer resources to water customers.	<ul style="list-style-type: none"> Continue to promote local water conservation and water quality programs (e.g. Keep It Clean Partnership, Center for Resource Conservation) to Louisville residents and businesses on the City's website, via community alerts, through the City's water bill inserts and any other appropriate channel.
29	W-ET1S3: Develop, market to the community, and update Louisville specific plans that address water conservation and quality.	3	<p>As part of the Louisville Sustainability Series, a community outreach session is being planned to address Louisville specific plans that address water conservation and quality. This session is scheduled for November 29, 2017 at the Louisville Library.</p> <p>In addition, resources currently exist on the City's Sustainability page on the website. See W-ET1S2 for more.</p>	<ul style="list-style-type: none"> Host a community outreach session to address Louisville specific plans that address water conservation and quality.

Transportation

Internal Target 1: Develop balanced system that serves the entire City.			
30	T-IT1S1: Adopt Transportation Master Plan that identifies alternative means so citizens of all ages can safely and comfortably walk or ride a bike.	1	<p>A meeting was held in July 2017 to determine the timeframe and feasibility of a Transportation Master Plan. It was determined that it should ideally begin in early 2018. Funding is needed. (\$50,000 - \$100,000)</p> <ul style="list-style-type: none"> Create a Transportation Master Plan to define and analyze transportation priorities. Ensure that it includes the identification of alternative modes of transportation, including multi-modal access points and transit pathways, so citizens of all ages can safely and comfortably walk or ride a bike.
31	T-IT1S2: Invest in bicycle, pedestrian and transit options, which provide safe, pleasant non-vehicle means of accessing schools, commercial areas, recreational facilities and municipal locations.	2	<p>According to one member of LSAB, the primary goal of this strategy is to reduce the number of miles driven and reduce fossil fuel use; resulting in a reduction in SOV and GHG emissions in the city.</p> <p>The secondary goal is to encourage citizens to walk or bike to promote a healthy lifestyle.</p> <p>To achieve those goals, this strategy calls for creation of Transit Pathways to mass transit connectors, commerce areas, schools, and city facilities (rec center library, etc.) through a network of bike only lanes and enhanced street design (wide sidewalks, traffic quieted streets, trees,</p> <p>The Transit Pathway system was envisioned to be separate, but complimentary, to the Louisville's existing recreational trails as it would serve a distinctly different purpose.</p> <p>To be successful, this strategy requires committed support from the Planning Department and City Council to ensure that Transit Path development is given weight during development/renovation projects. It also requires input and support from Public Works for installation of a safe network of Transit Paths on city streets, paths and enhanced street design.</p> <p>In addition, many walking and cycling routes are currently in place (32 miles of</p> <ul style="list-style-type: none"> Determine what the City could do, if anything, to help Commuting Solutions develop sponsors for Bike Share. Consider the installation a bike repair station outside of the library.

			<p>cycling paths within City boundaries), with planned improvements. Also:</p> <ul style="list-style-type: none"> • There are two new underpass projects planned or in progress, with one nearing completion in the Fall of 2017. • A bike cage is being installed at the Highway 36 overpass. The Police Department has two bikes to use internally. • A preliminary First and Final Mile study has been initiated. <p>The Transportation Master Plan would be extremely useful in making a more thorough study of outstanding needs, desires and feasibility of transportation priorities. Recommendations are included under strategy T-IT1S1.</p>	
	Internal Target 2: Reduce SOV and GHG emissions and cost impact for City staff			
32	T-IT2S1: Offer incentives to City staff such as: bus / carpool / vanpool subsidies, Bike-to-Work incentives, bike parking and shower facilities.	2	<p>Currently, there is bike parking at the City Hall.</p> <p>In addition, one shower exists in City Hall, with more at the Recreational Center, but not in other facilities. Interviews with City Hall staff who utilize the CH shower, however, state that it is “not welcoming or inviting” as the room shares a space with paint supplies. A study would be required as to whether these would be used enough to justify cost of installment.</p> <p>Preliminary conversations with Human Resources staff indicate it may be possible to add bike-to-work in the Employee Wellness program. To implement this, it will be important to take into account staff members who live in areas where alternative modes of transportation are not reasonable, and to be inclusive of people with differing mobilities. Therefore, this would need to be one of multiple alternatives eligible for incentives.</p> <p>Other incentives could include the provision of an EcoPass to employees. Unfortunately, according to Commuting Solutions, this would require the provision to all employees equitably, and not just to those who say they would use the pass. With 180 employees, this could be expected to be a significant benefit cost. This would, however, be a significant step toward setting an example for the Louisville community. Commuting Solutions is currently exploring this cost further so the City can make an informed decision. It should be noted that this service has been offered by the City in the past but was discontinued due to low usage.</p> <p>Also, Louisville supported RTD’s Ride the Bus campaign on September 28, 2017 by manning 4 Louisville bus stops with incentives. In addition, Boulder County</p>	<ul style="list-style-type: none"> • Explore whether the Human Resources Department could add bike-to-work as an incentive in the Employee Wellness program and implement, if possible. • Determine if any City facilities require further bike racks. • Make a plan regarding upgrades or installation of shower facilities for staff. • Continue to investigate ways for the City to provide relevant or feasible transportation benefits.

			provided a grant to preload 6,000 new MyRide pre-loaded bus passes to increase riders on the bus and to reduce single passenger vehicles on the road. Sign-up events were in July/August 2017 at the Library.	
33	T-IT2S2: Develop transportation solutions with neighboring communities to establish efficient connections in regional transit.	2	<p>Ultimately, this may be more thoroughly investigated through the development of the Transportation Master Plan, but there are several recent and current projects that address this strategy:</p> <ul style="list-style-type: none"> • An E-bike ordinance was recently passed, allowing e-bikes on Louisville bike paths. E-bikes help riders attain farther distances with less effort, both within and between communities. • The Louisville Call-n-Ride program (RTD) allows residents to call for a ride between communities within Louisville. • The RTD system allows for travel between communities. (The City Manager's Office is beginning to discuss a new route serving CTC with RTD.) • RTD initiated a Ride the Bus campaign and Boulder County has provided a grant to advertise MyRide pre-loaded bus passes, both of which Louisville supported through staff, outreach, venue and funds. • A new bike shelter/cage is being installed on the Hwy 36 overpass to improve non-vehicle access to the bus stop and encourage transportation between communities. • The City Manager's Office is beginning to discuss new routes with RTD, and there is a future bus service being considered from the CTC to destination points within the area. • Bike Share (Zagster) received funding in May 2017. It will need sponsors, but it should be up and running in 6-12 months. • The Call-N-Ride now serves the Louisville Recreation Center from the Superior side. • In coordination with DRCOG, the City of Louisville and Town of Superior 	<ul style="list-style-type: none"> • Continue to discuss with RTD routes between neighboring municipalities and Louisville to improve regional and local transit service. • Develop alternative transportation solutions between communities into the future Transportation Master Plan. • Continue to explore an RTD bus route serving the CTC/Major employment center. • Continue to work with Commuting Solutions to move the FastTracks project forward, as well as other multi-modal projects.

			<p>coordinated corridor timing improvements to reduce vehicle delay/idling/emissions.</p> <ul style="list-style-type: none"> • In coordination with Superior, Louisville led the initiative to build the DDI, which saved more delay/idling/emissions on the US 36 BRT route than the previous US 36 RTD Queue Jump project was achieving. • In addition, Via offers transportation services between communities. <p>Additionally, FastTracks, the passenger train system that is currently operating for a short distance in Denver, will eventually be built out to Louisville and beyond (Longmont). It is not scheduled to be implemented in Louisville, however, until 2040. This is an endeavor the City should continue to pursue and attempt to move through the legislative process more quickly on a state and federal level.</p>	
External Target 1: Support telecommunication efforts				
34	T-ET1S1: Support upgrading of communication infrastructure that would improve internet speeds.	3	<p>The Library reports that they have recently upgraded their wifi network (in 2017) by increasing internal access points. It should be noted that this is an important community outreach in that it allows people of all vulnerabilities to access the internet for free, thus leveling the playing field for education, telecommuting opportunities, and even learning through play. It also provides a safe place for teenagers to be who may not otherwise have any place to go, or who just want to do what any teenager does, but can't due to lack of home access.</p> <p>Currently, the Louisville City Council has approved putting City broadband on the November 2017 ballot. This would potentially allow the City to procure broadband services or partner in a way that would allow the City to upgrade/streamline its municipal communication capacity. This would primarily be for internal use, but may have some opportunities to provide broadband to the public in public buildings.</p> <p>The City Hall also currently provides free wifi to the public it serves.</p>	<ul style="list-style-type: none"> • If City Broadband is approved by vote, then move forward with streamlining and improving City facilities' broadband capacity where relevant. • Work to develop a more formal telecommuting policy for City employees.
External Target 2: Reduce SOV and GHG emissions				
35	T-ET2S1: Explore programs to fund and implement RTD EcoPass for City residents and employees.	2	<p>According to the Deputy City Manager, this has been utilized in the past and was discontinued due to lack of participation. Funding needs are high and do not readily exist. See above (T-IT2S1) for further information.</p>	<ul style="list-style-type: none"> • None. Addressed above T-IT2S1.

36	T-ET2S2: Develop bike maps and way finding signage	2	Public Works has indicated a willingness to develop a map for residents showing all non-vehicle access points. They are currently developing an ADA parking map. In addition, the Planning department has indicated that a plan to put Zagster bike stations between communities is in progress, but not yet funded. More research needs to be conducted regarding “First and Final Mile” connections, which will be considered as part of the Transportation Master Plan. Boulder County released a 2017 Bike Map this year with detailed routes all over the county available for public use. Commuting Solutions, also, has a pocket map showing bike access points across four communities, including Louisville.	<ul style="list-style-type: none"> • Develop a Louisville-specific map for residents showing all non-vehicle access points • Explore what the City can/should do to expand First and Final Mile program through implementation of the Transportation Master Plan.
37	T-ET2S3: Incentivize businesses to include electric vehicle charging stations.	2	<p>The Planning Department reported that businesses could be incentivized to build out for or provide electric vehicles supply equipment (EVSE) as potential “waiver” currency when negotiating for particular waivers (i.e. offsets). The addition of EVSE with new build projects could be added in a guideline list in the current PUD project.</p> <p>Additionally, Partners for a Clean Environment (PACE) currently can help businesses with advice and/or rebate options for implementing EVSE stations, but the City does not currently advertise this particular service from PACE on the website. Grants exist through the Regional Air Quality Council (RAQC) which help not-for-profit entities, such as local governments, school districts and state agencies. Apartment/condominium complexes and businesses that own multi-vehicle parking facilities for fleet, public or guest / visitor are also eligible for EVSE funding. Local companies also exist that can help companies navigate rebates and the logistics of installing an EVSE.</p> <p>It should also be noted that the Mayor’s decision to join to Climate Mayors and to sign onto the letter to the Governor was a powerful statement of support from Louisville for building out EVSE infrastructure in Colorado, since this is one of the Governor’s commitments as a “Climate State.” This grassroots push from Mayors and the Governor is expected to have an effect on funding opportunities for municipalities from the State.</p>	<ul style="list-style-type: none"> • Add EVSE (electric charge stations) build-out into a guideline list in the current PUD project • Provide links on the website for information about rebates, grants, and services that would help incentivize businesses to install EVSE (electric charge stations). • Continue to support the Climate Mayors & States initiatives as a push for more funding for EVSE infrastructure within the municipality of Louisville, as well as between communities across the state and nation. • Consider adding EVSE (electric charge stations) build-out into a guideline list in the current PUD project.
38	T-ET2S4: Promote and use PACE sustainability services for businesses, and collaborate on a green	4	Over the last year, the City has promoted Partners for a Clean Environment (PACE) services via its website and through its Green Business Recognition program, in which PACE plays a key role. Affiliated with Boulder County, PACE also works through other organizations, such as the CTC Building Owners	<ul style="list-style-type: none"> • Continue to promote Partners for a Clean Environment (PACE) to help businesses with transportation

	business recognition program.		<p>Association and the Louisville Chamber of Commerce, to promote transportation options for Louisville businesses to reduce the number of single occupancy vehicles (SOV) on the road.</p> <p>The City strongly encourages and promotes PACE for its business outreach services, which includes “free expert advisor services, incentives and a certification program to help businesses measure and gain recognition for their successful progress in energy, waste, water and transportation. PACE Partners are businesses committed to supporting a strong economy, implementing environmentally sustainable practices and becoming leaders in our community.”</p>	options with the aim of reducing the number of single occupancy vehicles on Louisville roads and between neighboring communities.
External Target 2: Incorporate smart growth principles and walkable communities into land use				
39	T-ET3S1: Adopt programs to improve ease-of-use for the first and final mile of commuter pathways.	2	This strategy appears to repeat the intention in T-ET2S2 “Develop bike maps and way finding signage.”	<ul style="list-style-type: none"> None. Strategy addressed in T-ET2S2.
40	T-ET3S2: Improve walkability through crosswalks and safe school routes with BVSD partnerships.	3	<p>Public Works reports that they work directly with BVSD whenever an issue arises and that there are no current outstanding issues that have been brought to their attention.</p> <p>The Planning and Building Department reports that there is room for improvement and that the city needs to continually work with all stakeholders.</p>	<ul style="list-style-type: none"> Continue to work directly with BVSD whenever an issue arises concerning crosswalks and safe school routes.
Waste				
Reduce production and increase landfill diversion				
41	Ws-IT1S1: Expand recycling programs to include hard to recycle materials (e.g. electronics and pharmaceuticals)	1	<p>The City does not currently host a hard-to-recycle day for residents within Louisville. This is not a service that could be added as part of a contract with a residential hauler for door-to-door pick-ups, along with compost, recycling and waste.</p> <p>Funding would be required for this activity, likely between \$3K-\$5K per event. It is possible that this type of event could receive grant funding from the</p>	<ul style="list-style-type: none"> Work to determine what a Hard-to-Recycle Day for Louisville would cost and explore whether the City wishes to either apply for a grant or has capacity to host one or two events annually.

			<p>county (Zero Waste Grant / Sustainability Grant) or from Colorado Department of Health and Environment (CDPHE) through a Recycling Grant.</p> <p>Currently, residents may take hard-to-recycle materials to the Boulder Center for Hard to Recycle Materials (CHaRM) for a fee. The City also hosts two free branch collection days per month for woody debris only.</p>	
42	Ws-IT1S2: Install triple bin (recyclable, compostable, trash) waste collection at City facilities and parks as practical	3	<p>Most City facility buildings have at least one or more collections of triple bin waste bins. Parks do not have any options besides trash collection for the landfill. The Recreation Center's system is okay, but is undergoing renovation, so will need additional bins. The Police Department did have three bins in the break room area, but the compost bin has disappeared at the time of this report. Restrooms in facilities may or may not compost. There is one public outdoor recycle bin in front of the City Hall.</p> <p>Louisville has 27 parks, of which none have triple bin systems installed. All waste accumulated in City parks is collected by staff and goes directly to the landfill.</p> <p>In order to implement a 3-bin system at all facilities and parks, an analysis would need to be performed to determine suitable locations and logistics (i.e. cross-contamination and staffing challenges). For parks, for example, it may be more useful to include one or more recycling bins, and not include compost bins, due to the high rate of cross-contamination and failure at public parks for this type of service (If composting is contaminated by non-compostable materials, haulers will add it all to the waste stream so as not to contaminate the compost cycle.) Education through staff training is highly recommended to help ensure maximum participation and better success for the triple bins currently being used in City facilities.</p> <p>An interview with the Parks and Recreation Department revealed that one welcome way to divert a significant amount compostable materials from the park's waste stream is to explore a dog waste composting service at the City's dog park and/or open space. The Boulder County Sustainability Office has indicated that this would be within scope for a Zero Waste Grant.</p> <p>In addition, the City should make every effort to not inadvertently cause residents to use single-use items. For example, a resident recently reported to the LSAB that a water fountain in a city park was not functional. He also</p>	<ul style="list-style-type: none"> • An inventory should be taken of all parks and facilities to determine which facilities need bins for diversion (e.g. recycling or composting). An analysis of cost should be made, as well as expected challenges and recommendations. • Apply for either a CDPHE Recycling grant or a Boulder County Zero Waste Grant at the end of 2017 (and going forward) for possible funding of new bins for parks or facilities and/or for funding of a composting service for dog waste at the City's dog parks.

			<p>reported that the bin next to the fountain was a waste can (landfill destined) overflowing with plastic water bottles. It is possible that upgrading fountains may have a mitigating impact on this waste stream.</p> <p>An interview with the Parks and Rec Director revealed that many of the drinking fountain issues are more related to water pressure than with broken fountains. Even so, many of the city's fountains are aging and could use replacement. This would require an investigation into necessity and budget by the Parks and Rec Department.</p> <p>In addition, the Events Coordinator reports that composting facilities are lacking when hosting City events. While the waste collected is all compostable (utilizing compostable cups and utensils), there is not enough storage space in which to put the resulting compost waste. She suggests an upgrade to bin size (one or two 96 gallon rolling bins) in which to put event trash at City Services for later collection.</p>	
43	Ws-IT1S3: Establish City purchasing guidelines that consider impact from product lifecycles.	2	<p>A draft City Green Purchasing Guideline document is in the beginning stages of development. Establishing Green Purchasing Guidelines would be beneficial both financially and environmentally to City operations. Currently, Louisville City departments are free to order office supplies from their preferred office supplier, usually Source or Staples. Currently, much of the white copy and printer paper purchased by the City is 30% recycled content, but not all, depending on department. Many other office supplies purchases are not eco-friendly, even when an alternative exists at a competitive price.</p> <p>A recent analysis of office supplies purchased by the city from the two primary office supply companies reveal that done strategically, money could be saved through the replacement of non-recycled content products with recycled content products. This will be discussed more thoroughly when the policy is presented to council.</p> <p>Regardless, a more fundamental campaign is needed beyond the replacement of supplies to their more sustainable counterparts to actually reduce the use of paper. This would include a staff-wide cultural shift to utilize digital tools as much as possible, instead of paper. Examples of policies to encourage this shift could include the development of guidelines to not print onto paper items that may be read digitally and for staff to bring laptops or tablets to meetings, rather than to expect printouts, or to always use double sided printing when</p>	<ul style="list-style-type: none"> Consider centralizing all purchases through one vendor to streamline eco-friendly product selection and to utilize competitive pricing through the setting up of contract items. If centralizing through one vendor is not desirable or possible, then continue current relationships, applying the Green Purchasing Policy to purchase decisions. Adopt Green Purchasing Guidelines that promote eco-friendly products be purchased when there is a choice and the selection is not cost-prohibitive. These guidelines would continue to favor local purchases over eco-friendly purchases. Develop a plan to shift City staff

			<p>printing is necessary.</p> <p>Interviews with the various departments suggest that certain measures are in progress toward a digital shift. The Finance and IT Departments are developing a new ERP in order to prevent the need to print certain items that are needed by the Finance Department, which are then turned around and rescanned back into the system.</p> <p>The IT Department reports it has decommissioned more than half of the large copiers the City had in the last 4 years, and replaced existing copiers with far more efficient, energy smart versions.</p> <p>The Planning and Building Department, also, has begun to make a shift toward digital documents through the implementation of a new software review system. Even so, the IT Department says their new ERP will not solve all needs to print and return for scanning and the Planning and Building Department has expressed a strong desire to digitize far beyond what is currently in place. The Human Resources department, as well, has expressed a desire to provide tablets for interviewers during the interview process, rather than the provision of large paper packets, but do not currently have available tablets for this purpose.</p> <p>The systemic reduction of paper use across departments would very likely reduce copier/printer equipment needs significantly, providing further savings and offsets for any additional purchase of devices such as tablets or digital meeting aids, such as Smart TVs.</p>	<p>culture toward digital document usage, rather than print.</p>
	External - Develop educational programs to reduce business & residential waste			
44	Ws-ET1S1: Partner with local retailers to reduce use of non-recyclable, non-compostable, and non-reusable containers.	2	<p>The City currently strongly encourages that all food containers used at Street Fair and City sponsored events by participating retailers are compostable.</p> <p>One significant way to address this strategy would be a potential partnership between the City and grocers and/or retailers to address plastic bag usage. The City could consider a campaign to recommend or encourage grocers and/or retailers to adopt a “bring your own bag” system, or to provide only paper bags for customers, which are both biodegradable and much more easily recyclable. For greater success, though, the City may want to evaluate an ordinance mandating use of a “bag fee” by grocers and/or retailers to</p>	<ul style="list-style-type: none"> Consider an ordinance to implement a plastic bag fee at Louisville grocery and/or retail stores. Consider an ordinance to require all Louisville businesses to recycle and compost, using the licensed hauler of their choice.

			<p>encourage customers to bring their own bags. These systems have proven highly successful in many cities around the nation to reduce landfill waste generated by retail bags, with some areas in the US banning plastic bags outright. States and areas in the United States banning the use of plastic bags in retail stores include coastal North Carolina, much of San Francisco, and Portland. While Louisville's neighbor, the City of Boulder, has not banned use of plastic bags by retailers, they have created a bag fee mandate in grocery stores only. The program has become well accepted, with shoppers sometimes even encouraged to donate their bag fee to a charity when not used. Reports show that bag usage in grocery stores dropped by 69%. Retailers like the fee because it allows them to capture revenue for bag usage. For example, the way the bag fee works in Boulder is that all grocery stores are required to charge 10 cents for every plastic or paper bag used at the checkout. The stores retain four cents of the fee and the remaining six cents is sent to the City of Boulder to address the impacts of disposable bags in the community.</p> <p>In addition, the City of Louisville currently does not require retailers – or any businesses – to recycle and compost, despite a requirement for residents to do so. To require businesses to recycle and compost would require an ordinance. This could potentially be done while still empowering the business to choose their own hauler. In the past, the City Council has not agreed to make this mandatory for businesses. It is possible that this could be reevaluated in the future.</p> <p>Furthermore, the City will be renegotiating its waste contract and issuing an RFP for renewal of the waste contract in 2019. These additional topics will not be addressed by this contract, but they would be appropriate to revisit together in mid-to-late 2018.</p>	<ul style="list-style-type: none"> Consider making it a requirement that retailers participating in City Events use compostable food service products.
45	Ws-ET1S2: Increase awareness through City's online sources regarding options for hard to recycle materials.	4	<p>CHaRM information may be easily found on two of the City's website pages:</p> <ul style="list-style-type: none"> Residents>Sustainability Residents>Sustainability>Recycling Options and Information 	<ul style="list-style-type: none"> Continue to make CHaRM information available via the City website and watch for opportunities to include information via other outreach methods.
46	Ws-ET1S3: Encourage Homeowner Associations (HOAs) to offer the same level of waste services (e.g.	2	<p>The City of Louisville currently does not require Home Owner's Associations (HOAs) to recycle and compost, despite a requirement for its residents to do so. Unlike other residents, HOAs currently offer waste services with their own selected haulers. While not required, Louisville HOAs currently offer recycling</p>	<ul style="list-style-type: none"> Consider a study session and potential ordinance to require all Louisville HOAs to offer recycling and composting along with their

	compost) as the community.		<p>services, but not necessarily composting services.</p> <p>To require HOAs to recycle and compost would require an ordinance. This could potentially be done while still empowering the HOA to choose their own licensed hauler with pay-as-you-throw pricing. In the past, the City Council has not agreed to make this mandatory for HOAs. It is possible that this could be reevaluated.</p> <p>It is noteworthy that this project would directly and potentially significantly impact GHG emissions recorded in Louisville's annual GHG inventory. Rates of diversion factor into these calculations.</p> <p>The City will be renegotiating its own residential (non-HOA) waste contract and issuing an RFP in late 2018 for renewal in 2019. While the potential requirement of an HOA to provide both composting and recycling is not be addressed by this contract, it might be an appropriate issue to revisit with the City Council in mid-to-late 2018 while similar topics are being raised.</p>	trash service, using the hauler of their choice.
47	Ws-ET1S4: Promote and use PACE sustainability services for businesses, and collaborate on a green business recognition program.	4	Over the last year, the City has strongly promoted Partners for a Clean Environment (PACE) services via its website and through its Green Business Recognition program, in which PACE plays a key role. Affiliated with Boulder County, PACE also works through other organizations, such as the CTC Building Owners Association and the Louisville Chamber of Commerce, to assist Louisville businesses in considering energy, water, waste, and transportation options. This includes initiatives that reduce energy, water usage, and promote zero waste.	<ul style="list-style-type: none"> Continue to promote Partners for a Clean Environment (PACE) to promote the Green Business Recognition program and to promote zero waste initiatives for businesses.
External - Adopt financial incentives for waste reduction by residents & businesses				
48	Ws-ET2S1: Promote recyclable substitutes/replacements for single use throw-away items, such as plastic bags, foam clamshell food containers, disposable plastic water bottles, etc.	3	This appears to repeat the intent of above strategy Ws-ET1S1: "Partner with local retailers to reduce use of landfill waste." See above for comments and recommendations.	<ul style="list-style-type: none"> None.
49	Ws-ET2S2: Promote markets for Citywide generated	3	This strategy represents the effect of promoting recycling and composting nationally and globally, and not a measurable local strategy in its own right. It	<ul style="list-style-type: none"> None.

	recyclables and compost.		is notable that recycling alone generates 85,000 jobs in Colorado.	
50	Ws-ET2S3: Encourage use of County Hazardous Materials Management Facility (HMMF) through the no-copay program.	4	<p>Residents of Louisville may currently take hazardous materials to the Hazardous Materials Management Facility (HMMF) free at drop off. This is a service the City of Louisville supports through utility bill fees (\$30K per year) and is well-utilized with 1,356 drop-offs (46 tons of hazardous waste) by Louisville residents in 2016. Fifty-two tons of hazardous waste were dropped off at the HMMF by Louisville residents in 2015.</p> <p>This service is currently promoted via the City website. This diversion effort factors into a reduction of GHG emissions by the community.</p>	<ul style="list-style-type: none"> Continue to promote residential use of the Boulder County Hazardous Materials Management Facility (HMMF).
External - Divert commercial waste disposal				
51	Ws-ET3S1: Support commercial food composting.	2	<p>The City currently strongly encourages that all food containers and leftover food used at City sponsored events (including Street Fair) by participating retailers be composted.</p> <p>The City of Louisville currently does not require businesses to compost or recycle, despite a requirement for residential (non-HOA) waste services to do so. To require businesses to recycle and compost would require an ordinance. This could potentially be done while still empowering the business to choose their own hauler. In the past, the City Council has not agreed to make this mandatory for businesses. It is possible that this could be reevaluated in the future. This is further addressed in Ws-ET1S1.</p> <p>In addition, the Planning and Building Department has expressed a desire to place a “Room to Recycle” requirement and/or incentives in the new Design Guidelines in order to encourage commercial and multi-family building development to plan for recycling access.</p> <p><u>This requirement is already in zoning code (LMC 17.16.265) but could also be evaluated for inclusion in future building codes.</u></p>	<ul style="list-style-type: none"> Consider inclusion of “room for recycling <u>and composting</u>” requirement and/or incentives in the new Design Guidelines <u>and new building codes</u>.
52	Ws-ET3S2: Provide free waste audits for businesses and support zero waste implementation by	3	<p>The City does not have capacity to provide free waste audits for businesses. The City of Louisville currently promotes PACE, however, which provides waste audits for businesses. This is already addressed in above strategy Ws-ET1S4.</p>	<ul style="list-style-type: none"> None.

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	promoting PACE.			
Local Food and Agriculture				
	Develop system of City supported community gardens			
53	L-IT1S1: Encourage additional community garden locations throughout Louisville.	1	<p>One member of the LSAB reports the following: In 2016 Council requested that LSAB investigate the feasibility of a second community garden. It was suggested that the garden location serve the new South Boulder Road high-density housing developments. In a subsequent meeting between LSAB and the Planning Department it was revealed that no city owned public use land or green spaces had been included in those developments.</p> <p>There were approximately 20 general inquiries on obtaining a plot for the 2017 season. All plots were rented in 2017. For the 2017 season, the number of people impacted by the garden directly was approximately 80. As many gardeners donate surplus produce to food banks, an additional number of people benefited from the garden indirectly. The impact on the community is also felt in the public events the garden sponsors: Music in the Garden, Kids Night in the Garden, The Harvest Festival. These activities are attended by non-gardening members of the community.</p> <p>The existing garden has a wait list for the 2018 season.</p> <p>If suitable land is made available, additional gardens are certainly feasible. Denver Urban Gardens has agreed to sponsor a second garden in Louisville. The current Garden Leaders have expressed a willingness to mentor the Leaders of a second garden.</p> <p>City staff does not currently have capacity to lead the effort toward additional gardens. To accomplish the 2015 Community Garden project, LSAB and a group of residents led the charge, enlisting a non-profit group for management.</p> <p>Any new community garden location would be dependent on a variety of issues, most notably access to water. The Parks and Recreation Director has indicated that he would be supportive of additional community garden locations, but that he is not aware of any current requests from the</p>	<ul style="list-style-type: none"> Continue to work with local resident led groups to enable community gardens, if desired. Work with the Planning Department to give suitable weight to public green spaces during development and renovation projects.

			community. If the LSAB or a resident group desires to take charge, however, it seems the City would be open to supporting.	
54	Conduct workshops for community gardening	1	City staff does not currently have capacity to conduct workshops for community gardening. For the City to hold a workshop on community garden, it would be wise to ensure City staff is in place to lead and facilitate the implementation of a garden, which it is currently not in a position to do. The Community Garden does, however, hold a workshop pre-growing season on community gardening. Additionally, the LSAB could potentially facilitate a workshop on community gardening.	<ul style="list-style-type: none"> The LSAB should consider holding an informative workshop on community gardens to gauge interest in additional gardens.
External - Develop citizen based food sales program				
55	Allow citizens to sell locally produced items such as eggs, honey and produce.	2	Citizens may currently sell locally produced items at an appropriate venue under Cottage Food Law, with an automatic exemption from the Colorado Retail Food Protection Act. As a private entity, the Farmer's Market in Louisville, for example, allows for these types of sales at their own discretion, requiring only a business license and insurance for sales of raw agricultural products. To do more, the City could adapt zoning regulations that would allow vendors more flexible sales of locally produced goods, such as from their own lots.	<ul style="list-style-type: none"> The City should consider adapting zoning regulations to allow vendors more flexible sales of locally produced goods, such as the ability to sell from one's own lot.
56	Provide resource information about local food economy.	4	There is a list of resource links for the Louisville Farmer's Market, local CSAs, the Community Garden, etc. on the City of Louisville website, on the Sustainability page.	<ul style="list-style-type: none"> Continue to provide resource information about local food on City website.
57	Track community supported agriculture participation.	1	Community Supported Agriculture (CSA) information may be found on the Louisville website, on the Sustainability page. CSAs are private businesses. The City, therefore, has no mechanism, ability, or jurisdiction to track community participation in any CSA.	<ul style="list-style-type: none"> None

Conclusions

These recommended actions address the fulfillment of the various SAP strategies compiled by LSAB and adopted by City Council in 2016 for the purpose of Louisville's fiscal and environmental sustainability.

As stated above, the LSAB will be provided with a list of recommendations regarding updating some of the strategies.

While the recommendations in this plan span multiple departments and stakeholders, the ability to track and implement the above recommendations will largely depend on a reliable project management system. Currently, there is not a long-term staff position to fill this position.

Further, to keep these strategies relevant and up-to-date, it is recommended that the LSAB review and update the SAP every two years.

With the recommendations listed in this 2-Year Work Plan, the City can decide if they wish to pursue these recommendations, potential grants, as well as a longer-term staff position for tracking, evaluation and management.